UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/617,669	07/17/2000	Eric P. Traut	068167.0103	8184

41505   7590   02/09/2005
WOODCOCK WASHBURN LLP
ONE LIBERTY PLACE - 46TH FLOOR
PHILADELPHIA, PA 19103

EXAMINER
CHUONG, TRUC T

ART UNIT	PAPER NUMBER
2179	

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/617,669	TRAUT ET AL.
	Examiner	Art Unit	
	Truc T Chuong	2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _24 November 2004_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-20_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _1-20_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   This communication is responsive to the communication, filed 11/24/04.

2.   Claims 1-20 are pending in this application. Claims 1, 8, 11, and 12 are independent

claims, and all independent claims are amended. This action is made non-final.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

4.   Claims 1-2, 6, 8-15, and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Santoro et al. (U.S. Patent No. 6,724,403) in view of Vineyard, Jr. et al. (U.S. Patent No.

6,727,920 B1).

As to claim 1, Santoro teaches a computer system for running one or more software

applications, wherein the software applications are suitable for generating a video output, said

single computer system comprising:

a host operating system suitable for displaying a graphical user interface (a user interface

for displaying tiles (thumbnails) representing reduced sizes of information sources, applications,

and programs, e.g., col. 6 lines 38-59, and figs. 1 & 4); and

wherein the host operating system is able to display for a user a reduced-size (miniaturized thumbnails, e.g., col. 8 lines 35-67) that are being operated in a background mode (dynamic bookmarking, e.g., col. 8 lines 29-65, col. 9 line 25, and fig. 1);

although Santoro teaches the thumbnails can be from different platform such as: audio, broadcast signal (e.g., col. 9 lines 10-17), Santoro does not clearly teach that there are multiple emulated operating systems being emulated by one or more emulator programs running on the host operating system. Vineyard clearly teaches that there are more than one operating systems can be selected from a list (fig. 4). It would have been obvious at the time of the invention, a person with ordinary skill in the art would like to have the multiple operating systems of Vineyard in the multiple display resource of Santoro to allow the user to select a desired operating system via a user activatible control (col. 3 lines 30-32).

As to claim 2, Santoro in view of Vineyard teaches the computer system of claim 1, further comprising one or more virtual video memory components suitable for storing the video output of the emulated operating systems (e.g., col. 4 lines 34-54, and fig. 1 & 4).

As to claim 6, Santoro teaches the computer system of claim 1,

wherein the graphical user interface is a windowing environment suitable for displaying one or more windows (e.g., col. 6 lines 38-59, and figs. 1 & 4); and

wherein the portion of the graphical user interface comprising the reduced-size representation is a window (miniaturized thumbnails, e.g., col. 8 lines 35-67).

As to claim 8, it is individually similar in scope to claim 1 above; therefore, rejected under similar rationale.

As to claim 9, Santoro teaches the computer system of claim 8, wherein the reduced-size

representations are representations of the video outputs of the virtual machines that are being

operated in the background mode (e.g., col. 6 lines 38-59, and figs. 1 & 4).

As to claim 10, the modified Santoro teaches the computer system of claim 9,

further comprising a virtual video memory associated with each of the virtual machines

(Vineyard teaches more than OS, fig. 4) ; and

wherein the reduced-size representations are generated from the video information stored

in the virtual video memory associated with each virtual machine (Vineyard teaches more than

OS, fig. 4).

As to claim 11, the modified Santoro teaches a method for displaying a reduced-size

image of multiple emulated computer systems executing on a single computer system, said

method comprising the steps of:

suspending one or more of the multiple emulated computer systems by saving to memory

in the host computer system the image of the emulated computer system (running background

mode, e.g., col. 8 lines 29-65, fig. 1 and Vineyard, e.g., fig. 4); reading in at the emulator

program from memory in the host computer system the image of the suspended emulated

computer system (running background mode, e.g., col. 8 lines 29-65, fig. 1 and Vineyard, e.g.,

fig. 4); interpreting in the emulator program the contents of the saved image of the suspended

emulated computer system (Tiles, grids and content are created, saved and restored via the

metabase, e.g., col. 15 lines 52-64);

displaying a reduced-size representation of the suspended emulated computer system

(running background mode, e.g., col. 8 lines 29-65, fig. 1 and Vineyard, e.g., fig. 4).

As to claim 12, Santoro teaches a method for displaying a reduced-size image of multiple emulated computer systems executing on a single computer system, said method comprising the steps of:

reading in at the emulator program from memory in the host computer system the image of the emulated computer system; interpreting in the emulator program the contents of the image of the emulated computer system (e.g., col. 6 lines 38-59, and figs. 1 & 4);

displaying a reduced-size representation of the emulated computer system (figs. 1 & 4);

periodically updating the reduced-size representation of the emulated computer system (dynamic bookmarking, e.g., col. 8 lines 29-65, col. 9 line 25, and fig. 1).

As to claims 13-15, and 17-20, they are method claims of system claims 1, 1, 2, 8, 1, 9, and 10. Note the rejections of claims 1, 1, 2, 8, 1, 9, and 10 above respectively.

5.   Claims 3-5, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Santoro et al. (U.S. Patent No. 6,724,403) in view of Vineyard, Jr. et al. (U.S. Patent No. 6,727,920 B1), and further in view of Ote et al. (U.S. Patent No. 5,367,628).

As to claim 3, the modified Santoro in view of Vineyard teaches the computer system of claim 2, but the modified Santoro does not teach wherein one or more of the video memory components are VRAM memory. Ote clearly teaches VRAM memory (col. 4 lines 47-56, and figs. 2-3). It would have been obvious at the time of the invention that a person with ordinary skill in the art would want to have this highly desirable feature of Ote's VRAM into the modified system of Santoro to provide fast-block-transfer access to the internal memory.

As to claim 4, the modified Santoro teaches the computer system of claim 1, wherein the

emulated operating systems operating in a background mode are active (dynamic bookmarking,

e.g., col. 8 lines 29-65, col. 9 line 25, and fig. 1), and one or more thumbnail images (col. 6 lines

38-59, and figs. 1 & 4); but the modified Santoro does not clearly show wherein information

stored on the video memory components at predetermined intervals. Ote clearly teaches

periodically transfer display text and image data, col. 3 lines 50-55, and col. 4 lines 47-55). It

would have been obvious at the time of the invention that a person with ordinary skill in the art

would want to add Ote's time interval into the modified system of Santoro to update displayed

information.

As to claim 5, Santoro teaches the computer system of claim 4, wherein the

predetermined intervals are such that the thumbnail images are real-time representations of the

video output from the active software applications (real-time and active applications, e.g., col. 8

lines 30-67).

As to claim 16, this is a method claim of system claim 3. Note the rejection of claim 3

above.

6.   Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable Santoro et al. (U.S.

Patent No. 6,724,403) in view of Vineyard, Jr. et al. (U.S. Patent No. 6,727,920 B1), and further

in view of Brett (U.S. Patent No. 5,850,471).

As to claim 7, the modified Santoro does not teach the reduced-size representations are

created using a bilinear sampling technique; however, Brett clearly describes the bilinear

sampling technique in his High-definition Digital Video Processing System (col. 10 lines 58-74

and col. 11 lines 1-11). It would have been obvious, at the time of the invention, a person with

ordinary skill in the art would want to have this data reduction feature of Brett's bilinear

sampling technique into the modified system of Santoro to improve performance and quality in

graphic data loading process (col. 11 lines 1-10).

Response to Arguments

7.   Applicant's arguments with respect to claims have been considered but are moot in view

of the new ground(s) of rejection.

Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Mernyk et al. (U.S. Patent No. 6,496,206 B1) teach thumbnails, reduce size,

interval, and active background (cols. 2-6 and figs. 1-4).

Ishida (U.S. Patent No. 5,684,969) teaches active thumbnails, listing, timing, and

interval (cols. 3-13 and figs. 3-22).

9.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Truc T Chuong whose telephone number is 571-272-4134. The

examiner can normally be reached on M-Th and alternate Fridays 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Heather R. Herndon can be reached on 571-272-4136. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Truc T. Chuong

02/05/05

BA HUYNH
PRIMARY EXAMINER